



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,503	12/17/2001	Jeffrey K. Reinemann	10559-540001/P12560	4314
20/985	7590	11/29/2007		
FISH & RICHARDSON, PC				
P.O. BOX 1022				
MINNEAPOLIS, MN 55440-1022				
EXAMINER				
CHAMPAGNE, LUNA				
ART UNIT		PAPER NUMBER		
3627				
MAIL DATE		DELIVERY MODE		
11/29/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/024,503

**Applicant(s)**

REINEMANN, JEFFREY K.

**Examiner**

Luna Champagne

**Art Unit**

3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/21/07 has been entered.

Claims 1-9 are presented for examination. Claims 20-36 are cancelled.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumenau et al. (6,195,703 B1), in view of Pian et al (5,357,632), in further view of Bonnell et al. (5,655,081).

Re claim 1, Blumenau et al. disclose a method of managing resources among a plurality of networked processors 22,23,21,20 that include a host processor 22,23 and a remote processor 21; col. 7 lines 61,62 disclose monitoring frequencies of the host to

balance usage, the frequencies being a fixed range is read as a predetermined upper threshold and thus reads on “the utilization of the local resource maintained within a pre-determined upper threshold configured by an authorized user<sup>1</sup>”; and col. 7 line 59 discloses a dynamic balancing facility which computes a new list of host controls on the switches based upon, inter alia, frequency threshold, which reduces the availability of the local resource to the remote processor by the host processor.

However, Blumenau et al. do not specifically disclose a method of collecting accounting information from an accounting manager residing in and executed by a corresponding networked processor of the plurality of networked processors, wherein the accounting manager monitors utilization of resources at the corresponding networked processor.

Bonnell et al. disclose a method of collecting accounting information from an accounting manager residing in and executed by a corresponding networked processor of the plurality of networked processors, wherein the accounting manager monitors utilization of resources at the corresponding networked processor (*see e.g. col. 6, lines 61-67, and col. 7 lines 1-6 – each respective agent software system carries out tasks on*

---

<sup>1</sup>Blumenau et al. discloses in full: The digital computer 60 is also programmed with a dynamic balancing facility 63 that periodically computes a new list of storage subsystem ports for each of the hosts to access, based on the frequencies measured by the host activity monitoring facility 62 and a specified priority level assigned to each of the hosts. The priority level, for example, is specified by a system administrator 65. The dynamic balancing facility 63 maintains in the digital computer 60 a copy of each list 61 of storage subsystem ports for each host to access. Therefore, the digital computer 60 need not read any corresponding list 57 in the switch control computer in order to determine the routing characteristics of the switch 50 for any host. The dynamic balancing facility 63, for example, accesses the list 61 in order to compute the loading on each of the storage subsystem ports from the measured frequencies of data packets received or transmitted from each host.

*the computer system in which it is installed such as discovering which resources and applications are present in the computer system, monitoring particular aspects of the resources and applications present on the computer system).*

It would be obvious to modify the method of Blumenau et al. to include an accounting manager residing in and executed by a corresponding networked processor of the plurality of networked processors, wherein the accounting manager monitors utilization of resources at the corresponding networked processor, as taught by Bonell et al., in order to disperse system /data processing and avoid having a single point of failure.

Blumenau et al., in view of Bonell et al., do not specifically disclose a method of receiving an upper limit of resources that may be consumed by the remote processor, the resources including a local resource controlled by the host processor; releasing the local resources to the remote processor based on the collected accounting information and if an amount of resources consumed by the remote processor is below the upper limit, the utilization of the local resource maintained within a pre-determined upper threshold.

However, Pian et al. disclose a centralized accounting manager 122 which discloses determining an upper threshold for the local resource 146 e.g., an "upper limit is placed on the local ready task entry queue 146" and has a determined upper limit of resource consumption for the remote processor, see col. 9 lines 30-45 overflow occurs when nodes 124 have more tasks than they can hold. Further, Pian et al. disclose releasing ready task entries to remote processors 112 when the processors 112 are not in a more than they can hold mode.

It would be obvious to modify the method of Blumenau et al. to include a centralized manager such as device 122 in Pian et al. and to determine an upper limit consumption for a remote processor in Blumenau et al. as a function of releasing the local resource as taught by Pian et al., the motivation being the increased ability to forecast downstream availability of a resource.

Re claims 2,8: *see*, Blumenau col. 7 lines 63 et seq. a specified priority level is assigned to each of the hosts thereby answering the limitation of negotiating because prioritization inherently requires negotiations; the loop ports of the hosts 24,25 are read as an amount of the local resource and the switch 40 is read as an amount of a remote resource; and since the activity e.g. releasing into service of the switch is proportional to that of the loop ports, there is read an exchange there between.

Re claim 3, 5: Since the utilization of one host loop port in Blumenau will be exclusive of another's, this occurrence is read as substantially different in time.

Re claim 4, 6: the other resource is read as the balancing facility 63 of the computer in Blumenau which is read as the centralized location.

Re claim 9: the user-defined condition is read as the access of hosts to storage in Blumenau.

Re claim 7: col. lines 13 et seq. discuss trying a port to determine if it is busy and if so then rerouting data until the first port is freed which is read as form of credit which is redeemed once the port frees up in Blumenau.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Reply to Arguments:**

2. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new grounds of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luna Champagne whose telephone number is (571) 272-7177. The examiner can normally be reached on Monday - Friday, 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on (571) 272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. Ryan Zeender/  
Supervisory Patent Examiner, Art Unit 3627

Luna Champagne  
Examiner  
Art Unit 3627

November 21, 2007